



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,761	02/09/2004	Jeffrey W. Yeo	6270/136	8720

46260 7590 07/19/2006

BRINKS HOFER GILSON & LIONE/PML
PO BOX 10395
CHICAGO, IL 60610

EXAMINER

LAU, TUNG S

ART UNIT	PAPER NUMBER
----------	--------------

2863

DATE MAILED: 07/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/775,761

Applicant(s)

YEO ET AL.

Examiner

Tung S. Lau

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-19 and 21-26 is/are rejected.
- 7) ☒ Claim(s) 7 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6, 8-19 and 21-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Carr (U.S. Patent 6,968,295).

Regarding claim 1:

Carr discloses a method of identifying at least one unknown energy driver (Col. 17, Lines 9-34), the method comprising: receiving quantity metadata and energy usage data (Col. 16, Lines 34-56); determining at least one relationship between the quantity metadata and energy usage data by analyzing the quantity metadata and energy usage data (Col. 16, Lines 34-56); assessing the quality of the at least one relationship (Col. 16, Lines 34-56) to determine the quantity metadata contributing to the determined at least one relationship (Col. 31-32, Lines 54-29), identifying the at least one energy driver from the quantity metadata contributing to the determined at least one relationship (Col. 16, Lines 34-56), wherein energy consumption is at least based on the at least one energy driver (Col. 16-17, Lines 34-34); and outputting the identified at least one energy driver (Col. 16-17, Lines

Art Unit: 2863

34-34), wherein the outputted at least one energy driver is a variable that influences the energy consumption and influences the energy usage data (Col. 31-32, Lines 54-38).

Regarding claim 11:

Carr discloses a system for identifying unknown energy drivers in an energy distribution network (Col. 17, Lines 9-34, fig. 1), the system comprising: an energy drivers application (Col. 4, Lines 14-64), the energy drivers application having; an input module operative to receive quantity metadata and energy usage data (Col. 4, Lines 14-64); a processing module coupled with the input module and operative to determine at least one relationship by analyzing the quantity metadata and energy usage data (Col. 4, Lines 14-64, Col. 16, Lines 34-56), the processing module being further operable to assess the quality of the at least one relationship to determine the quality metadata contributing to the determined at least one relationship (Col. 31-32, Lines 54-38) and identify the at least one energy driver based on the quantity metadata contributing to the determined at least one relationship (Col. 16, Lines 34-56); wherein the at least one energy driver influence energy consumption (Col. 17, Lines 9-33) and influences the energy driver usage data (Col. 31-32, Lines 54-38); and an output module coupled with the processing module and operative to output the identified at least one energy driver (Col. 16-17, Lines 34-34).

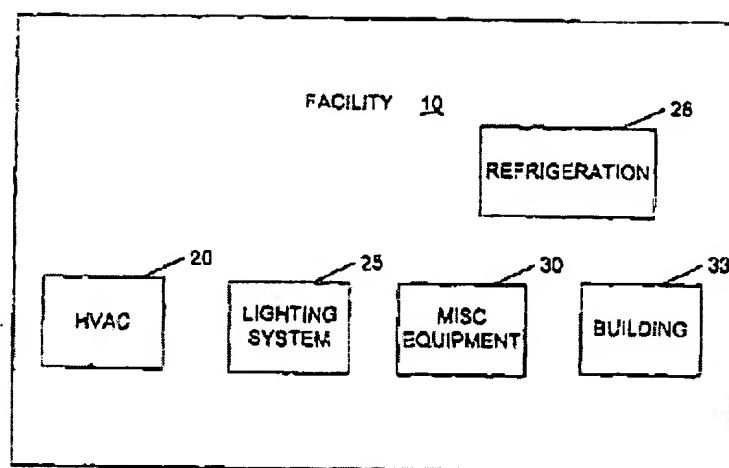


FIG. 1

Regarding claim 24:

Carr discloses a system for identifying unknown energy drivers in an energy distribution network (Col. 17, Lines 9-34), comprising: means for accepting quantity metadata and energy usage data associated with consumed energy (Col. 17, Lines 9-34, fig. 1); means for determining at least one relationship by analyzing the quantity metadata and energy usage data (Col. 17, Lines 9-34); means for assessing the quality of the at least one relationship to determine the quantity metadata contributing to determined at least one relationship (Col. 16-17, Lines 34-34); means for identifying the at least one energy driver from the quantity metadata contributing to the determined at least one relationship; and influencing the amount of the consumed energy and energy usage data (Col. 31-32, Lines 54-29); and means for outputting the identified at least one energy driver (Col. 16-17, Lines 33-34).

Regarding claim 25:

Art Unit: 2863

Carr discloses an energy drivers application implemented on a computer (Col. 8, Lines 21-37), the computer having a processor and a memory coupled with the processor (Col. 8, Lines 21-37), the energy drivers application comprising: first logic stored in the memory and executable by the processor and operable to accept quantity metadata and energy usage data (Col. 8, Lines 21-37, Col. 16, Lines 34-56);

second logic stored in the memory, executable by the processor and coupled with the first logic (Col. 17, Lines 8-31), and operable to determine at least one relationship by analyzing the quantity metadata and energy usage data (Col. 17, Lines 8-31), the second logic being further operable to assess the quality of the at least one relationship to determine the quantity metadata contributing to the determined at least one relationship (Col. 31-32, Lines 54-58) and further identify the at least one energy driver from the quantity metadata contributing to the determined at least one relationship wherein the at least one energy driver comprises a variable influence energy usage (Col. 19, Lines 45-67, Col. 31-32, Lines 13-38), and third logic stored in the memory, executable by the processor and coupled with the second logic, and operable to output the at least one energy driver (Col. 19, Lines 45-67).

Regarding claim 26:

Carr discloses an energy drivers application for use in an energy distribution network (fig. 1, abstract), comprising: an input module operative to accept

quantity metadata and energy usage data (Col. 1, Lines 25-67); a processing module coupled with the input module and operative to determine at least one relationship by analyzing the quantity metadata and energy usage data (Col. 8, Lines 21-37), the processing module being further operable to assess the quality of the at least the relationship and identify the at least one energy driver from the quantity metadata contributing to the determined at least one relationship wherein the at least one energy driver comprises an external factor affecting energy consumption and the energy usage data (Col. 16-17, Lines 34-34, Col. 31-32, Lines 54-58); and an output module coupled with the processing module and operative to output the identified at least one energy driver (Col. 17, Lines 7-34).

Regarding claims 2, 15, Carr discloses relationship with time (Col. 10, Lines 1-14); Regarding claims 3, 16, Carr discloses relates to production levels (abstract); Regarding claims 4, 17, Carr discloses production schedules (Col. 5, Lines 32-39); Regarding claims 5, 18, Carr discloses related to process variable (Col. 17, Lines 7-34); Regarding claims 8, 21, Carr discloses generic algorithm (Col. 17-18, Lines 35-60); Regarding claims 9, 22. Carr discloses the energy usage are not ratiometrically linked (Col. 20-21, Lines 65-8); Regarding claims 10, 23, Carr discloses outputting graph (fig. 41); Regarding claim 12, Carr discloses network (Col. 8, Lines 21-38); Regarding claim 13, Carr discloses IED in a network (abstract, Col. 8, Lines 21-38); Regarding claim 14, (Col. 8, Lines 21-38) discloses measuring device coupled to network (abstract, Col. 8, Lines

21-38); Regarding claims 6 and 19, use of linear regression analysis (Col. 27, Lines 26-46).

Allowable Subject Matter

2. Claims 7 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitation of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: prior art fail to teach regarding claims 7 and 20, use of multivariate regression analysis.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

3. Applicant's arguments filed on 06/19/2006 with respect to the amended claims have been fully considered but they are not persuasive.

A. Applicant argues that the prior art does not show 'one unknown energy driver' (page 8, lines 16-17 of the Remarks).

The examiner reminds to the applicants that while the meaning of claims of issued patents are interpreted in light of the specification, prosecution history, prior art and other claims, this is not the mode of claim interpretation to be applied during examination. During examination, the claims must be interpreted

as broadly as their terms reasonably allowed. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). This means that the words of the claim must be given their plain meaning unless applicant has provided a clear definition in the specification. In *re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989).

Words in patent claims are given their ordinary meaning in the usage of the field of the invention, unless the text of the patent makes clear that a word was used with a special meaning; *Renishaw PLC v. Marposs Societa ' per Azioni*, 158 F.3d 1243, 1250, 48 USPQ2d 1117, 1122 (Fed. Cir. 1998)

Where there are several common meanings for a claim term, the patent disclosure serves to point away from the improper meanings and toward the proper meanings. See also MPEP § 2111.01

USPTO personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure. In *re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997).

Carr discloses the collected data compare to an energy model to check if the actual output is above the define threshold for error (Col. 32, lines 54-13), if the error is not acceptable, the system will recommend the customer to 'tune up' or improve the system energy usage efficiency (Col. 32, Lines 30-38) by adjusting maintenance issues (Col. 32, Lines 37-67).

Merriam-Webster's online dictionary defines driver as one that drives (see attachment), so energy driver means energy drives, in view of the invention and in the context of the specification and drawings, means energy drives data or usage. Carr clearly discloses 'one unknown energy driver' in Col. 31-32, Lines 54-28.

B. Applicant continues to argue that the prior art does not show 'energy driver is identify' (page 9, lines 1-15 of the Remarks).

Carr clearly discloses 'energy driver is identify' and output in Col. 31-32, Lines 54-67. Here Carr discloses that a machine need to tune up in order to be more efficient (Col. 32, Lines 53-67) the result after the tune up is then again compare for system energy usage acceptable efficiency.

C. Applicant continues to argue that the prior art does not show 'identification of an energy driver that influence the energy usage data' (page 9-10, lines 17-15 of the Remarks).

Carr clearly discloses 'identification of an energy driver that influence the energy usage data' and output in Col. 32, Lines 13-67. Here Carr discloses the comparison of model with the actual data if is within the energy usage threshold, if not, the system recommended the user to perform a specific machine tune up to improve efficiency (Col. 32, Lines 39-67). Carr clearly discloses 'identification of an energy driver that influence the energy usage data' and output in Col. 32, Lines 13-67.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung S Lau whose telephone number is 571-272-2274. The examiner can normally be reached on M-F 9-5:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 571-272-2269. The fax phone numbers for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2863

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TL


MICHAEL NGHIEM
PRIMARY EXAMINER